



Protecting our IT Infrastructure Against Seismic Events

Information Provided by Ron Flammia



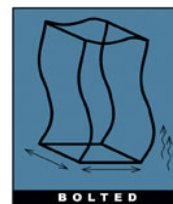
Within the Helena SMDC (State of Montana Data Center), there reside many electronics cabinets containing various network, server, and switching components. In the event of seismic activity, these cabinets may become unstable, damaging the components within. There are a number of traditional methods to secure these cabinets:

Traditional Seismic Mitigation Methods

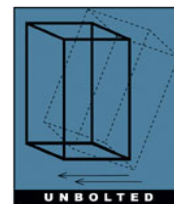
Traditional mitigation strategies for securing electronics cabinets and other equipment have run the gamut from the failed "do-nothing" or just "let-it-roll" philosophy, to bolting, cross-bracing, and structural stiffening of cabinet frames. While these methods may work to keep the equipment or cabinet frame upright, they actually increase the likelihood of system failure as they provide a direct pathway on which damaging shock and vibrations can travel. The more rigid the connection, the more likely there will be damage to drive heads, optical lasers, and other sensitive componentry.



STIFFENED
Shock and vibrations sent into and contained within stiffened frame.



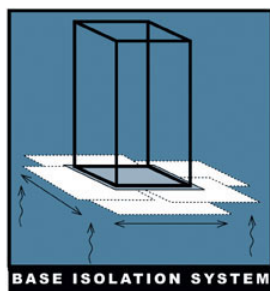
BOLTED
Stresses on cabinet frame and travel of shock and vibrations.



UNBOLTED
Reaction of a cabinet to seismic ground motion.

A more innovative method used within our Data Center is the **dual platform ISOBase** solution:

The Innovative Seismic Mitigation Solution



Illustrates the use of a dual-platform base isolation system. The bottom platform moves with ground motion, thereby minimizing the transfer of shock and vibration into the frame. The bearing acts as a "white-noise" filter isolating the top platform from damaging vibrations. This allows equipment to continue to operate right on through seismic activity.

To see videos highlighting this technology, go to:
http://www.worksafetech.com/pages/Movies/IBMTTesting_FLV.html



Project Directives

What are Project Directives? Project Directives are formal decisions that have been made by the project's Core Team. It is a formal way of documenting and issuing notice on the decision.

Who issues them? Directives are issued by the Project Directors, once the item has been brought up before the project Core Team and a decision has been handed down by the team.

Why is it important to issue Directives? Directives are important because they formally lay out the direction that is to be taken by a team, how it is to be done, who is to do the work and finally where the funds to pay for the work are coming from.

Directives Issued to Date

0709-01 Project Billable Hours

0909-01 Fiber Installation

0911-01 Network Design

0110-01 SMDC EOC Direction

1209-04 SMDC Helena Mitigation

1209-05 SMDC Helena ITSD Goal Date

1209-06 Bresnan Fiber Plant Build

0110-02 SMDC Storage Array

0110-03 Helena ISOBase Seismic Mitigation

0110-04 Helena Data Center Service Access

0210-01 Data Center z10 Mainframe

0210-02 Data Center Cable Plant

0210-03 PBX Recommendation

Copies of these Directives are available on the project Share Point Site @ [Project Appointments and Directives](#)

"The SMDC will establish a state-of-the-art facility that will provide the capacity, reliability, and security the State of Montana deserves for its current and next generation enterprise IT systems."

~ Ron Baldwin, PMP & CIO, Department of Public Health and Human Services

SMDC Project Teams

FEATURED TEAMS

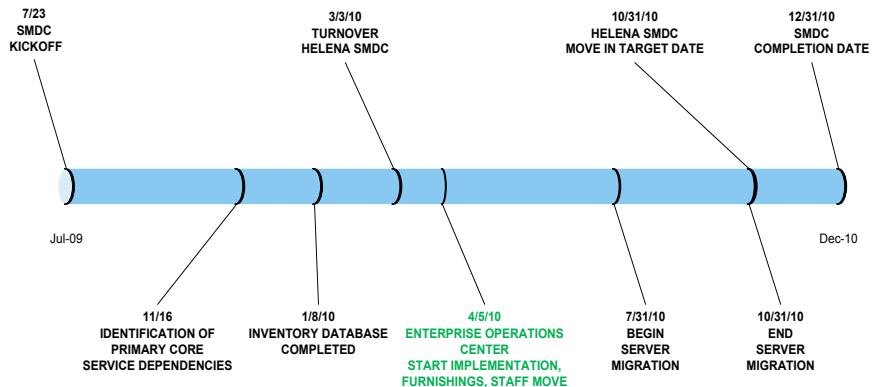
Storage Team: The Storage Team is to provide a plan for moving all existing storage functions from the Mitchell Bldg data center to the new SMDC Helena facility. In addition, the team will review, plan and implement an overall storage and backup strategy to improve cost and efficiency of the storage environment in both the Mitchell Bldg and the Federal Reserve Bldg.

Enterprise Operations Center (EOC) Team: The Enterprise Operations Center (EOC) is comprised of Multi-Agency personnel that maintain knowledge in the areas of Security, Computing, Application, Network and Storage for the State of Montana information system environment. It is the State of Montana's first line of defense for emergency situations, incident response, proactive monitoring and continual service improvement. The EOC consists of highly trained, team oriented individuals intimately familiar with all aspects of the State of Montana's information system environment.

Timeline

State of Montana Data Centers Project Timeline (tentative)

Update: 4/2/10



Meet the SMDC Steering Committee Members

FEATURED MEMBER



AMY SASSANO

Deputy Budget Director

Amy has been at the Budget Office since 1996 – serving three governors so far [Governor Racicot, Governor Martz, and Governor Schweitzer]. She has served in several positions over these years including Budget Analyst, Information Systems Manager, and Assistant Budget Director. As deputy, she assists the budget director with all aspects of budget development, budget implementation, and budget oversight. In addition to the SMDC advisory council, She sits on the State Workforce Planning Task Force, and represents the Budget Director on the Information Technology Board.

Amy has a Bachelor's degree from Montana Tech in Engineering. She is married with three boys (Colin age 10, Cale age 8, and Cohen age 2)